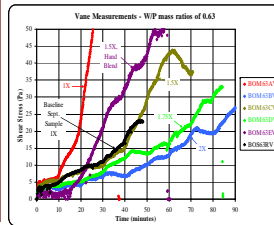
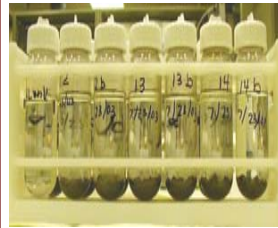


CEMENTITIOUS MATERIALS WORKSHOP



Wrap-Up Session

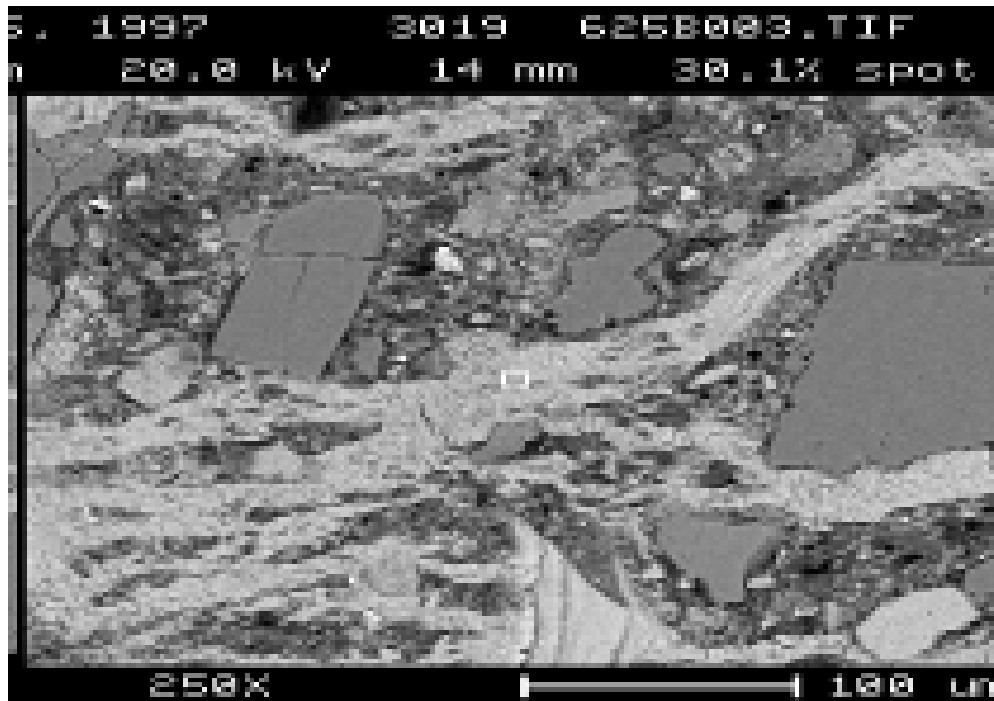
Cementitious Material for Waste Treatment, Disposal, Remediation and Decommissioning

Participant Discussion

December 12 to 14, 2006



Outline



- Describe
 - Current Knowledge
- Identify
 - Knowledge Gaps
- Discuss
 - Opportunities

Scope



- DOE Closure Projects
 - Waste Treatment
 - Waste Containment Structures
 - Environmental Restoration
 - Facility D&D
- Constructability, Operability, Reliability
- Long-term Environmental Performance

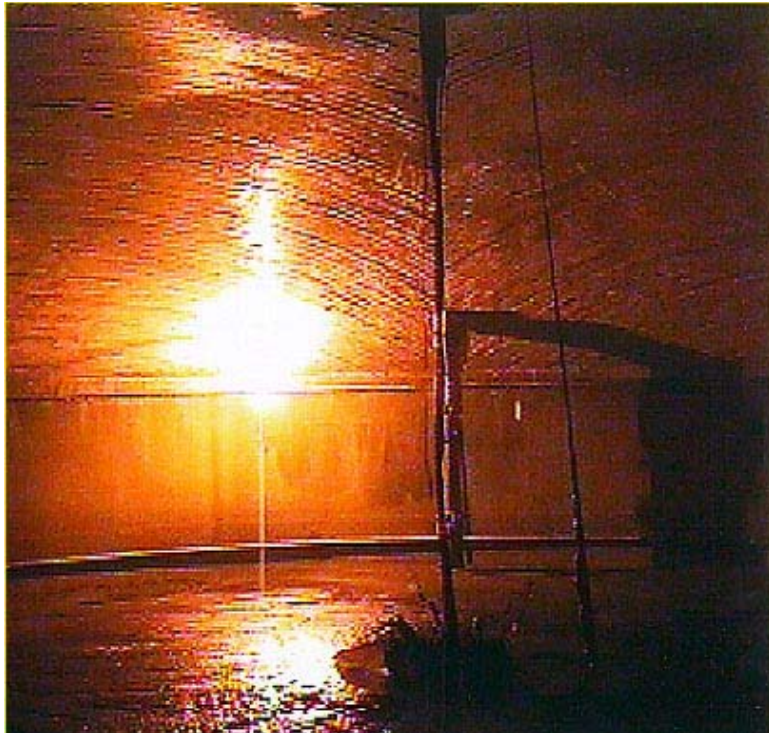
Approach

Put Science to Work



December 12 to 14, 2006

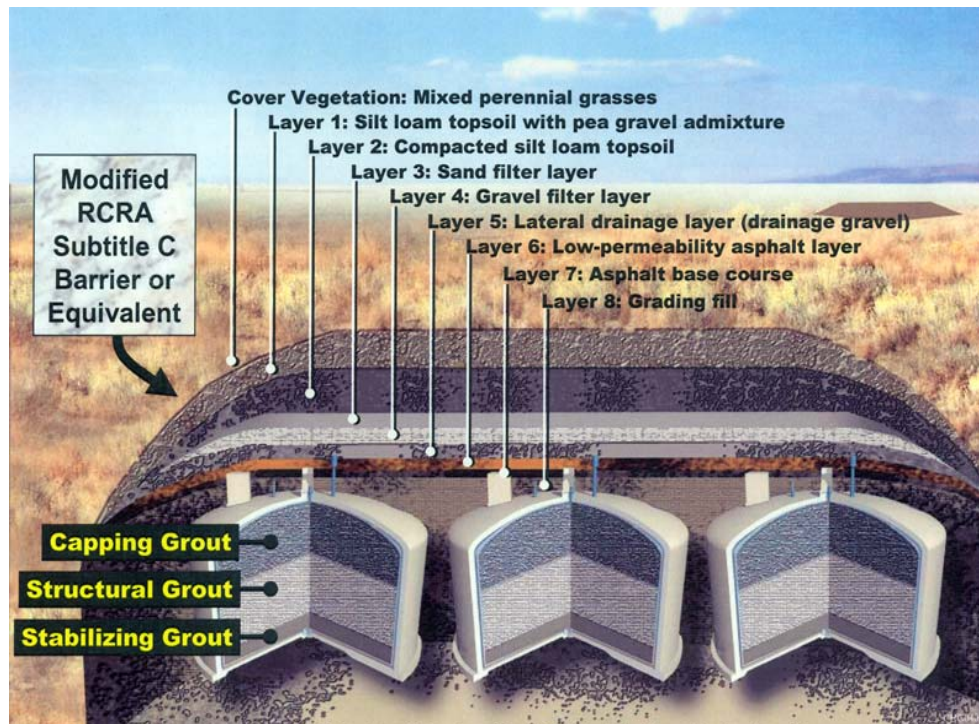
Motivation



SRS Tank 17 1998

- Support DOE Closure Projects
 - Reduce uncertainties
 - Technical
 - Programmatic
- Protect the Workers, Public and Environment
 - Short-term Risk Reduction
 - Long-term Risk Reduction
- **Everyone has a role to play**

Issues



- Mechanistic understanding
- Test protocols
 - Parameters
 - Accelerated aging
 - Operations
- Conceptual representation
- Modeling and Prediction
- Implementation
 - As designed vs as constructed
- Monitoring/Instrumentation

Peer Review throughout program

Broader Questions



Weldon Springs

- Concepts
 - Are we using appropriate concepts?
- Research and Development
 - Does the current R&D provide an adequate basis for the Closure needs?
- Scaling?
 - Material (atomic to full scale)
 - Process (laboratory to full scale)
 - Environmental (controlled to uncontrolled variables)
 - Time (days to 10⁷ years)
- Implementation
- Acceptance